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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,868	03/23/2004	Mark S. Schaefer	GP-304231 (2760/149)	2697

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General Motors Corporation  
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EXAMINER
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VO, TED T

ART UNIT	PAPER NUMBER
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2191

MAIL DATE	DELIVERY MODE
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07/03/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/806,868	<b>Applicant(s)</b> SCHAEFER, MARK S.	
	<b>Examiner</b> TED T. VO	<b>Art Unit</b> 2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 28-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. In view of the Appeal Brief filed on 04/22/2008, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

Claims 28-48 are pending in this application.

***Response to Arguments***

2. Arguments filed in the Brief on 04/22/2008 are moot in view of new ground of rejections.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 28-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kincaid, Pub No. US 2004/0117785 A1, filing on 12/2002, in view of Kellerer et al., “(Auto) Mobile Communication in a Heterogeneous and Converged World”, 12-2001, IEEE

As per claim 28: Kincaid discloses a method for managing software configuration update that is available from a server for every remote device, covering steps:

*identifying an updated version of a first software module for a first electronic module on the vehicle;* (Kincaid: See [0008]: “a version identifier”, [0011]: component/newer components/current versions, where these components are stored in a remote server [0050]);

*obtaining vehicle configuration data* ([0037] or a list of files/version identifier, etc.)

*representative of a current software configuration on the vehicle* (FIGURE 2: #260, and [008]: “received software files”), *wherein the vehicle configuration data includes the versions of software modules currently installed in electronic modules connected to the vehicle telematics unit over a vehicle communication bus, and the vehicle configuration data identifies interdependencies between the software modules* (See Figure 3, and FIGURE 4, refer to “INTERDEPENDENT”);

*determining whether the updated version of the first software module is compatible with the current software configuration* (See [0052]: “compares the list...”. See Figure 4: 410/425, the DLM Manager compares received data with current versions) *and*

*updating the first software module with the updated version by transferring the updated version* ([008]: “Software files”) *of the first software module from the vehicle telematics unit* (either transceiver 210 or mobile station) *to memory (#260) of the first electronic module (#263) via the communication bus* (wire/interconnection of #111) *if it is determined that the updated version of the first software module is compatible with the current software configuration* (See Figure 4. “Replaces old versions”; See [0052]).

The Kincaid’s *software configuration update is not of a vehicle*, but a mobile device that can be plugged in a car.

Kellerer discloses an access network (Kellerer: See Figure 3) for vehicle that has a gateway enable for plug-in for mobile devices, thus when a device like laptop, radio, mobile phone (Figure 3: 'Electronic modules':) requires for software update, it need only plug-in for connecting to the gateway installed in the vehicle, and thus the server and gateway will provide the software update.

Therefore, it is obvious to an ordinary in the art to combine the teaching of telematics devices as a Gateway of Kellerer used to download software update in the method of Kincaid. The plug-in will be conforming to the standard download for managing software configuration update that is available from a server for every remote device, including used in a vehicle, which has at least a network interface.

As per claim 29: regarding,

***The method of claim 28, wherein the obtaining step further comprises retrieving the vehicle configuration data*** (Kincaid: [0037] and see FIGURE 2, #260, and FIGURE 3, #263) ***from a call center*** ('Software update server') ***and the determining step further comprises determining at the call center whether the updated version of the first software module is compatible with the current software configuration.*** (e.g. the communication in FIGURE 1 described in FIGURE 2, or 0037; see [0044], and further see Kellerer).

As per claim 30: regarding,

***The method of claim 28, wherein the obtaining step further comprises obtaining the versions of the software modules currently installed in one or more electronic modules connected to the vehicle telematics unit*** (i.e. downing software files as noted) ***over a vehicle communication bus***

*by interrogating the one or more electronic modules via the vehicle telematics unit.* (Kincaid:

See Figure 3, and FIGURE 4, and further see FIGURE 2, the wired complexity connected to main processor for downloading the software files, and further see Kellerer).

As per claim 31: regarding,

*The method of claim 30, further comprising the step of:*

*providing the obtained versions of the software modules currently installed to the*

*call center* (See FIGURE 4, i.e. downloaded versions from software update server); *and*

*wherein the determining step further comprises determining at the call center whether the*

*updated version of the first software module is compatible with the current software*

*configuration.* (Kincaid: See FIGURE 4, and [0052]; the remote server provides the list of files and version identifiers, where the DLM uses this information for how to replace the old version, and further see Kellerer).

As per claim 32: regarding,

*The method of claim 30, wherein the obtaining step further comprises obtaining the*

*interdependencies between the software modules from the call center* (i.e. information and

software sent by remote sever contain the interdependencies of software, so that the DLM know how to replace the old version), *and the determining step further comprises determining at the*

*vehicle telematics unit whether the updated version of the first software module is compatible*

*with the current software configuration* (Kincaid: See Figure 4, and further see Kellerer).

As per claim 33: regarding,

***The method of claim 28, wherein, if it is determined that the updated version of the first software module is not compatible with the current software configuration*** (It is inherent in “comparing”, where the comparing step in the reference provides the differences between new one and old one so that it can replace the old one), ***then the method further comprises the step of replacing at least one of the other interdependent software modules with a version of the at least one other interdependent software module that is compatible with the updated version of the first software module*** (Kincaid: See Figure 4, refer to the task of DLM, and further see Kellerer).

As per claim 34: regarding,

***The method of claim 33, further comprising the steps of:***  
***determining which of the other interdependent software modules conflicts with the updated version of the first software module; and determining whether the conflicting software modules have a version available that is compatible with the updated version of the first software module.*** (Kincaid: See Figure 4, refer to the task of DLM, and further see Kellerer).

As per claim 35: regarding,

***The method of claim 27, further comprising the step of issuing a software request to the call center for the updated version of the first software module*** (Kincaid: [0009], and further see Kellerer).

As per claim 36: Functionality of the claim is the same as of Claim 28: See rationale addressed in the claim 28.



As per claim 37: Functionality of the claim is the same as of Claim 29: See rationale addressed in the claim 29.

As per claim 38: Functionality of the claim is the same as of Claim 30: See rationale addressed in the claim 30.

As per claim 39: Incorporated with the rejection of claim 36, regarding, *The method of claim 36, wherein the identifying interdependencies step further comprises identifying, at the call center, interdependencies between the updated version of the first software module and one or more other software modules installed in one or more of the electronic modules* (Kincaid: See FIGURE 4, and further see Kellerer).

As per claim 40: Functionality of the claim is the same as of Claim 33: See rationale addressed in the claim 33.

As per claim 41: Functionality of the claim is the same as of Claim 34: See rationale addressed in the claim 34.

As per claim 42: Incorporated with the rejection of claim 36, regarding, *The method of claim 36, wherein the step of identifying an updated version further comprises receiving a notification* (refer to the means of internet accessibility, voice data, email, conventional triggering event, receipt of notification message, etc, in [0044]) *at the vehicle telematics unit from the call center that the updated version of the first software module is available for installation in the first electronic module on the vehicle* (Kincaid: See [0008]: “a version identifier”, [0011]: component/newer components/current versions, where these components are stored in a remote server [0050], and further see Kellerer);

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As per claim 43: Incorporated with the rejection of claim 36, regarding, *The method of claim 36, wherein the step of identifying an updated version further comprises issuing a software request for each software module installed in the one or more electronic modules on the vehicle on a periodic basis and determining whether the latest versions of the software modules are installed on the vehicle* (Kincaid: [0009], FIGURE 4, and further see Kellerer).

As per claim 44: See rationale addressed in the rejection of claim 28.

As per claims 45-48: See rationale addressed in the rejection of claims 29-35.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted T. Vo whose telephone number is (571) 272-3706. The examiner can normally be reached on 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708.

The facsimile number for the organization where this application or proceeding is assigned is the Central Facsimile number 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR

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or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTV  
July 01, 2008

/Ted T. Vo/  
Primary Examiner, Art Unit 2191